



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re the Application of: **SUGANO, Masaru et al.**

Group Art Unit: **2655**

Serial No.: **09/730,607**

Examiner: **D. D. ABEBE**

Filed: **December 7, 2000**

P.T.O. Confirmation No.: **9246**

For: **AUDIO FEATURES DESCRIPTION METHOD AND AUDIO VIDEO FEATURES
DESCRIPTION COLLECTION CONSTRUCTION METHOD**

SUBMISSION OF APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, Va 22313-1450

June 25, 2004

Sir:

Submitted herewith are an original and two copies of an Appeal Brief in the above-identified U.S. patent application.

Attached please find a check in the amount of \$330.00 to cover the cost for the Appeal Brief.

If any additional fees are due in connection with this submission, please charge our Deposit Account No. 01-2340. This paper is filed in triplicate.

Respectfully submitted,

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP

William L. Brooks
Attorney for Appellants
Registration No. 34,129

RECEIVED

JUL 01 2004

Technology Center 2600

WLB/mla
Atty. Docket No. **001615**
Suite 1000
1725 K Street, N.W.
Washington, D.C. 20006
(202) 659-2930



23850

PATENT TRADEMARK OFFICE



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF APPEALS

APPEAL BRIEF FOR THE APPELLANTS

Ex parte Masaru SUGANO et al.

AUDIO FEATURES DESCRIPTION METHOD AND AUDIO VIDEO FEATURES

DESCRIPTION COLLECTION CONSTRUCTION METHOD

Serial Number: 09/730,607

Filed: December 7, 2000

Group Art Unit: 2655

Examiner: D. D. ABEBE

William L. Brooks
Attorney for Appellants
Registration No. 34,129

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP
1725 K Street, N.W., Suite 1000
Washington, D.C. 20006
Tel (202) 659-2930
Fax (202) 887-0357

RECEIVED

JUL 01 2004

Technology Center 2000

Date: June 25, 2004
Atty. Docket No. 001615



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re the Application of: **SUGANO, Masaru et al.**

Group Art Unit: **2655**

Serial No.: **09/730,607**

Examiner: **D. D. ABEBE**

Filed: **December 7, 2000**

P.T.O. Confirmation No.: 9246

For: **AUDIO FEATURES DESCRIPTION METHOD AND AUDIO VIDEO FEATURES
DESCRIPTION COLLECTION CONSTRUCTION METHOD**

APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, Va 22313-1450

June 25, 2004

Sir:

This is an appeal from the Office Action dated November 12, 2003 (Paper No. 5) in which claims 1-26 on appeal were finally rejected.

A Notice of Appeal and a Petition for Extension of Time were timely filed on April 21, 2004.

I. REAL PARTY IN INTEREST

The real party in interest is the assignee of the subject application, which is:

DDI CORPORATION
8, Ichibancho, Chiyoda-ku
Tokyo, Japan

RECEIVED

JUL 01 2004

Technology Center 2600

II. RELATED APPEALS AND INTERFERENCES

Appellants know of no other appeals or interference proceedings related to the present appeal.

III. STATUS OF CLAIMS

Claims 1-26 on appeal have been finally rejected under 35 USC §102(e) as anticipated by U.S. Patent 6,236,395 to **Sezan et al.** (hereafter "**Sezan et al.**").

IV. STATUS OF AMENDMENTS

All amendments have been entered, including the Amendment After Final Rejection filed March 18, 2004.

V. CLAIMS ON APPEAL

A clean copy of claims 1-26 on appeal is attached hereto as Exhibit A.

VI. SUMMARY OF THE INVENTION

The present invention generally relates to a method of describing the features of compressed or uncompressed audio data and a method of constructing the feature description collection of compressed or uncompressed audio video data (specification, page 1, lines 6-9).

Claims 1-18 on appeal are directed to audio features which are hierarchically represented by setting an audio program which means entire audio data constructing one audio program as a highest

hierarchy and describing the audio features in a order from higher to lower hierarchies, said hierarchies being represented by at least one audio program having a semantically continuous content and at least one of an audio scene and an audio shot, and said hierarchies being described by at least names of the hierarchies, audio data types, feature types and feature values described by audio segment information classified according to the feature types (Figs. 1-3; specification, page 9, line 24 to page 11, line 22).

According to these features, compressed or uncompressed audio data can be described hierarchically by using the novel method of the present invention. Besides, it is possible to provide compressed or uncompressed audio features description capable of high-speed, efficiently searching or inspecting audio data (specification, page 18, line 27 to page 19, line 11).

Claims 19, 21, 23 and 24 on appeal are directed to a compressed or uncompressed audio video feature description collection construction method, wherein feature descriptions based on multiple feature types are associated with each audio video program; the feature descriptions are extracted from multiple audio video programs based on a specific feature type; a feature description collection is conducted by using multiple extracted feature descriptions; and the feature description collection is described as a feature description collection file (Fig. 13; specification, page 19, line 26 to page 20, line 19).

Claims 20, 22 and 25-26 on appeal are directed to an embodiment of the present invention in which the feature type is a summary type; summary descriptions associated with the individual audio video programs are extracted from multiple audio video programs based on a specific

summary type; a summary collection is conducted using multiple extracted summary descriptions; and the summary collection is described as a summary collection file (Fig. 14; specification, page 20, line 20 to page 21, line 13).

VII. THE ISSUE

1. The sole issue on appeal is whether the invention, as recited in Appellants' claims 1-26 on appeal, are anticipated by Sezan et al. under 35 USC §102(e).

VIII. GROUPING OF THE CLAIMS

Rejected claims 1-18 on appeal should rise or fall together because they are all directed to a compressed or uncompressed audio data feature description scheme.

Rejected claims 19-26 on appeal should rise or fall together because they are all directed to a compressed or uncompressed audio video data feature collection description scheme.

IX. ARGUMENT WITH RESPECT TO THE ISSUES

A. THE REFERENCES

The sole prior art reference applied by the Examiner to reject the claims is Sezan et al.

Sezan et al. discloses an audiovisual information management system including at least one description scheme. For audio and/or video programs a program description scheme provides information regarding the associated program. For the user a user description scheme provides

information regarding the user's preferences. For the system a system description scheme provides information regarding the system. The description schemes are independent of one another. Preferably, the program description scheme, user description scheme, and system description scheme are independent of one another.

B. SUMMARY OF EXAMINER'S REJECTIONS

In the Office Action of November 11, 2003, the Examiner rejected claims 1-26 on appeal under 35 USC §102(e) as anticipated by Sezan et al.

As to claim 1 on appeal, the Examiner urges that Sezan et al. teaches an audio data feature description method, comprising the step of:

hierarchically representing an audio features where the (audio or video) program is at the highest hierarchy, segmenting the program into hierarchies and representing each segment with segment descriptors/features (Fig. 3; Figs. 13, 16-21; Col. 14, line 45-Col. 26, line 28; Col. 27, lines 12-3).

As to claim 2 on appeal, the Examiner urges that Sezan et al. teaches semantically representing scenes or shots of audio programs (Fig. 13).

As to claims 3-6 on appeal, the Examiner urges that Sezan et al. teaches where the descriptors reflect content and value of the audio data and where the segments are described with key frames and time codes (Col. 4, lines 59-65; Figs. 3-12).

As to claim 7 on appeal, the Examiner urges that Sezan et al. teaches an audio/video program description, wherein the feature values are represented by an audio thumbnail indicating audio pieces or images, and where the thumbnail is described according to the feature type and where the audio/video program is described in segments (Figs. 4-5).

As to claim 8 on appeal, the Examiner urges that Sezan et al. teaches where feature values are represented by a clip having arbitrary length (Figs. 10-11).

As to claim 9 on appeal, the Examiner urges that Sezan et al. teaches where a clip representing audio shots or scenes is represented as key audio clip/key-frame (Fig. 14).

As to claims 10-12 on appeal, the Examiner urges that Sezan et al. teaches where clips are represented by a plurality of object descriptions (Figs. 13, 15 and 20).

As to claim 13 on appeal, the Examiner urges that Sezan et al. teaches an audio data program description, where the data consists multiple channels represented as key streams and where an audio segment corresponding to the key stream is described (Figs. 4-12).

As to claim 14 on appeal, the Examiner urges that Sezan et al. teaches where audio segments are described in events (Fig. 3; Fig. 11; Fig. 13, 480).

As to claim 15 on appeal, the Examiner urges that Sezan et al. teaches where the program description comprises object description scheme (Fig. 13, 482).

As to claims 16 and 17 on appeal, the Examiner urges that Sezan et al. teaches an audio data description method, where a representative of audio shot or scene is represented as sequences of slide (Fig. 8).

As to claim 18 on appeal, the Examiner urges that Sezan et al. teaches an audio data feature description method where features of an audio program are segmented and described and value is produced indicating the level of the feature (Figs. 3 and 13; Fig. 14, 426).

As to claim 19 on appeal, the Examiner urges that Sezan et al. teaches an audio video data description method, wherein

feature type description are extracted and associated with programs; and

feature descriptions are extracted from one or more audio video programs and organized into meta description data (Figs. 3, 6 and 16).

As to claims 20-22 on appeal, the Examiner urges that Sezan et al. teaches where the feature types include a summary type (Col. 34, lines 36-42) and where multi-level summary collections are generated and feature identifiers are included (Col. 8, lines 33-48; Fig. 6).

As to claims 23-26 on appeal, the Examiner urges that Sezan et al. teaches where the feature descriptions structures are generated according to contents and summary types (Fig. 13, 402, 404; Fig. 3, 64).

C. APPELLANTS' ARGUMENT

Claims 1-26 on appeal are patentable over Sezan et al. under 35 USC §102(e).

For claims to be rejected under 35 USC §102, all elements recited in the claims must be disclosed in a single applied reference.

The Examiner has urged that column 14, line 45 - column 26, line 28 and column 27, lines 12-43 describe an audio data feature description method, wherein audio features are hierarchically represented by setting an audio program which means entire audio data constructing one audio program at the highest hierarchy and describing the audio features in order from higher to lower hierarchies.

Appellants respectfully disagree. Neither of these passages and none of the drawings show such a hierarchical representation of audio features.

The “program description scheme” in Sezan et al. only means a type of description scheme. Sezan et al. does not teach an audio data feature description method, wherein audio features are hierarchically represented by setting an audio program, which means entire audio data constructing one audio program at the highest hierarchy and describing the audio features in order from higher to lower hierarchies.

The Examiner has referred to various Figures for showing the elements recited in the other independent claims 7-8 and 13-19 on appeal.

Appellants respectfully disagree.

1. Contrary to the Examiner's assertion, Figs. 4-5 fail to relate to audio thumbnails, as recited in claim 7.

Figs. 4 and 5 in Sezan et al. teach only an interface for selecting programs. The "Thumbnail View" in column 15, line 39 of Sezan et al. appears to relate to a description of thumbnails, but Sezan et al. fails to teach "audio pieces" and "describing audio segment information of audio pieces as feature type", as recited in claim 7 on appeal.

2. Contrary to the Examiner's assertion, Figs. 10-11 do not relate to the relationship between audio scenes, audio pieces or audio shots, as recited in claim 9 on appeal.

Figs. 10 and 11 in Sezan et al. only teach an interface for reading programs. Sezan et al. fails to teach "audio shot" and "feature value of the audio shot are represented by an audio piece". It appears that "Highlight View" and "Event View" in column 16 correspond to those of Figs. 10 and 11, but the "Highlight View" and "Event View" comprise an identifier of start-frame, end-frame, and display-frame. They are representative sections extracted from a program. They differ from the present invention, representing feature values of one audio scene or one audio shot by an audio clip.

3. Contrary to the Examiner's assertion, Figs. 4-12 do not relate to audio data consisting of multiple channels or tracks, as recited in claim 13 on appeal.

The Examiner appears to misunderstand what is meant by "channel". The "channel" in Sezan et al. means TV channel which includes multiple contents. It is clear that a "key stream" of

the present invention is not taught in Sezan et al. A “channel” of the present invention means multiple audio data such as multiple languages, deputy sound, etc. included in a single content.

4. Contrary to the Examiner’s assertion, Figs. 3, 11 and 13 do not disclose a key event; that the content of the key event is described by text information; or that at least one audio segment corresponding to the key event is described, as recited in claim 14 on appeal.

Although claim 14 on appeal appears to relate to “Event Profile” in column 16 of Sezan et al., the “Event Profile” is different from the present invention. The “Event Profile” describes an event on video with “duration” comprised by two values of start-frame-id and end-frame-id, and adds a text and audio as an attached information. However, the present invention relates to an event on the audio itself. This is not taught by Sezan et al. Moreover, Sezan et al. does not teach that the key event is described as audio duration.

5. Contrary to the Examiner’s assertion, Fig. 13 does not disclose a key object; that the content of the key object is declared and described by text information; on that at least one audio segment corresponding to the key object is described, as recited in claim 15 on appeal.

Although it appears that claim 15 on appeal relates to “Object Profile” in column 20 of Sezan et al., the “Event Profile” is different from the present invention. The “Object Profile” describes an object on video with “duration” comprised by two values of start-frame-id and end-frame-id, and

adds a text and audio as an attached information. However, the present invention relates to an object on the audio itself. This is not taught by Sezan et al. Moreover, Sezan et al. fails to teach that the key object is described as audio duration.

6. Contrary to the Examiner's assertion, Fig. 8 does not refer to audio shots or audio slides, as recited in claims 16-17 on appeal, respectively.

Fig. 8 only teaches an interface for reading programs. It appears that Fig. 18 corresponds to "Shot View" in column 15 and that "Slide View" is similar to the present invention. "Shot View" comprise start-frame-id, end-frame-id and display-frame-id, and "Slide View" comprises a line of frames. Neither represents audio duration. Sezan et al. does not teach the limitations of claims 16 and 17 on appeal, namely, an audio program is represented as audio slide comprised by audio segment or audio file, the audio slide is declared and described as a feature type, and its feature value is described with audio segments or audio files.

7. Contrary to the Examiner's assertion, Figs. 3, 13 and 14 do not show that audio data for multiple feature types are described hierarchically according to the level values, as recited in claim 18 on appeal.

A symbol 426 in Fig. 14 does not teach hierarchical description depending on level values. The symbol 426 seems to relate to "Key Frame View", including "Clip" comprised by three values of start-frame-id, end-frame-id and display-frame-id. This is different from claim 18 on appeal, which recites a description of audio feature type and hierarchical description of audio segment based on it.

8. The Examiner has urged that Figs. 3, 6 and 15 show feature descriptions extracted from one or more audio video programs and organized into meta description data. This does not relate to feature descriptions extracted from multiple audio video programs based on a specific feature type, and constructing a feature description collection by using multiple extracted feature description, as recited in claim 19 on appeal.

Figs. 3, 6 and 15 do not teach claim 19 on appeal of the present invention. Namely, Sezan et al. selects and reads multiple programs by using metadata description, but it does not teach that new description groups are generated from the metadata description. However, claim 19 on appeal relates to generating feature description groups based on a specific feature type from metadata of each of multiple programs.

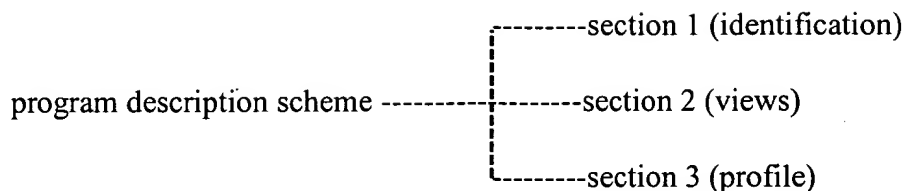
Despite these arguments, in the Office Action of November 12, 2003, the Examiner urged, among other things, that Sezan et al. still teaches the hierarchical representation of audio features where the entire audio data corresponding to one audio program is set at the highest hierarchy and the audio features are described in order from higher to lower hierarchies.

Appellants respectfully disagree. None of the passages in Sezan et al. cited by the Examiner pertains to hierarchies. Webster's New World Dictionary, Third College Edition, defines "hierarchy" as "a group of persons or things arranged in order of rank, grade, class, etc." The Examiner has stated:

According to Sezan the description scheme 406 provides for several different presentations (hierarchies) of video content (or audio), such as for example, a thumbnail view description scheme 410, a key frame view description scheme 412, a highlight view description scheme 414, an event view description scheme 416, a close-up view description scheme 418, and an alternative view description scheme 420 Col. 26, lines 40-50.

Thus, the Examiner has erroneously equated the various types of presentations in Sezan et al. to the hierarchical (by rank) representations of audio features recited in claim 1. Sezan et al. fails to teach, mention or suggest hierarchically ranking the various types of presentations, as in the present invention.

In particular, the Examiner has stated that the program description scheme in Sezan et al. comprises arranging a program into sections and/or categories (hierarchies). Appellants respectfully disagree. The “sections” do not refer to divided parts of a program, but rather to divided parts of the “program description scheme.” More, the “sections” are not elements of the program, but rather elements of the “program description scheme.” Sezan et al. discloses that “the first section identifies the described program. The second section defines a number of views which may be useful in browsing applications. The third section defines a number of profiles which may be useful in filtering and search application.” It is apparent that these sections are not a relation of hierarchies, but have equal status, as shown in the chart below.



Regarding the high level and low level features and/or descriptors in Sezan et al. (col. 13, lines 33-36), Sezan et al. teaches that the former is easily readable by humans while the latter is more easily read by machines and less understandable by humans (col. 13, lines 38-40). So the high level and low level features and/or descriptors in Sezan et al. do not refer to hierarchies.

The Examiner has stated, referring to Fig. 4 of Sezan et al., that “selecting a particular category, such as news, provides a set of thumbnail views of different programs that are currently available for viewing. In addition, the different programs may also include programs that will be available at a different time for viewing. Sezan et al. teaches a set of thumbnail views for video, but not for audio. In contrast, the present invention is directed to audio. Because a set of thumbnails defined by an audio segment is not visible, a program selection interface, as shown in Fig. 4 of Sezan et al. could not be used for audio. Thus, the present invention differs from Sezan et al.. A set of audio thumbnails in the present invention is used for searching audio to which a user desires to listen. In other words, the user can easily find a desired audio by playing back the set of audio thumbnails, which cannot be accomplished by Sezan et al., which is directed to video.

The Examiner has stated that several different presentations are hierarchies. Appellants respectfully disagree. Referring to Fig. 14, Sezan et al. discloses the several different presentations

describe a number of views (col. 26, lines 39-51). These are no hierarchies among them, but instead only equal relations.

Claims 1-8 and 16-17 on appeal recite this hierarchical representation of audio features.

The Examiner has urged that Figs. 3, 6 and 15 show feature descriptions extracted from one or more audio video programs and organized into meta description data. This does not relate to feature descriptions extracted from multiple audio video programs based on a specific feature type, and constructing a feature description collection by using multiple extracted feature description, as recited in claim 19 on appeal.

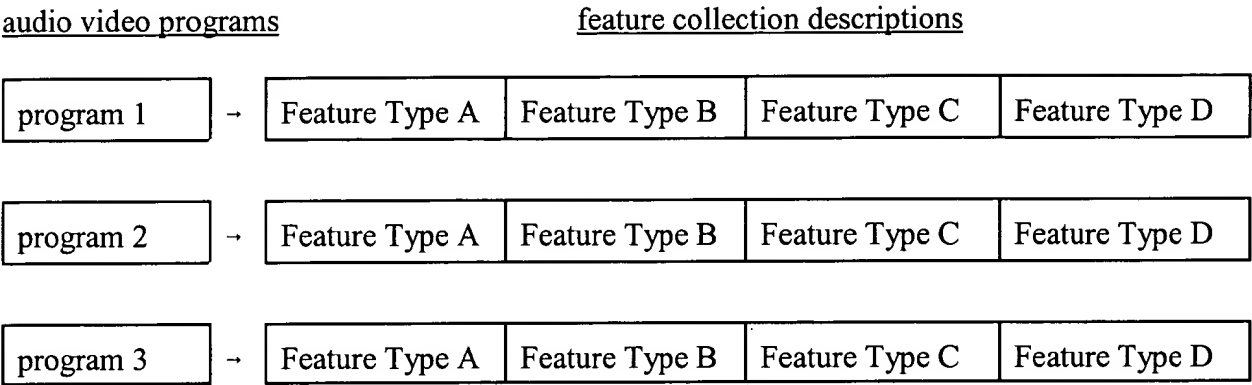
Thus, Figs. 3, 6 and 15 do not teach claim 19 on appeal. Namely, Sezan et al. selects and reads multiple programs by using metadata description, but it does not teach that new description groups are generated from the metadata description. However, claim 19 on appeal relates to generating feature description groups based on a specific feature type from metadata of each of multiple programs.

Sezan et al. teaches that, in the case of a plurality of audio video programs, different feature types (A, B, C and D) are extracted from each of the audio video programs (1-3), and then are separately combined to make systematic feature collection descriptions for each of them (see the top drawing below).

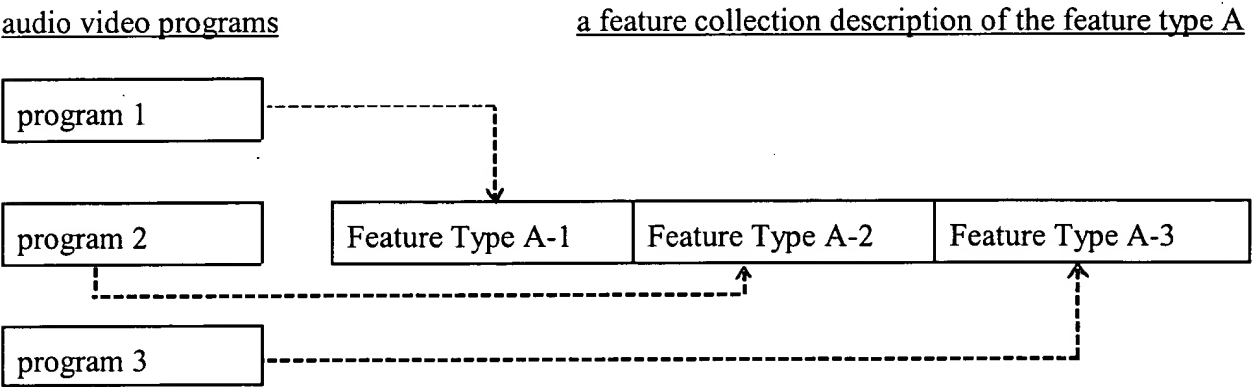
On the contrary, claim 19 on appeal teaches that a specific feature type (A) is extracted from each of a plurality of audio video programs (1-3), and then the specific feature types (A) are combined to make a systematic feature collection description for them (see the drawing below).

The distinctions between Sezan et al. and claim 19 on appeal are shown below:

Sezan et al.



Claim 19 on appeal



U.S. Patent Application Serial No. 09/730,607
Appeal Brief

X. CONCLUSION

For the above reasons, The Board of Patent Appeals and Interferences is therefore respectfully requested to reverse the Examiner's rejections of claims 1-26 on appeal and pass this application to issue.

In the event this paper is timely filed, Appellant hereby petitions for an appropriate extension of time. The fee for any such extension may be charged to Deposit Account No. 01-2340, along with any other additional fees which may be required with respect to this paper.

Respectfully submitted,

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP



William L. Brooks
Attorney for Appellants
Registration No. 34,129

WLB/mla
Atty. Docket No. 001615
Suite 1000
1725 K Street, N.W.
Washington, D.C. 20006
(202) 659-2930



23850

PATENT TRADEMARK OFFICE

Enclosures: Appendix A containing Claims on Appeal
Petition for Extension of Time

H:\HOME\etitia\WLB\00\001615\appeal brief

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re the Application of: **SUGANO, Masaru et al.**

Group Art Unit: **2655**

Serial No.: **09/730,607**

Examiner: **D. D. ABEBE**

Filed: **December 7, 2000**

P.T.O. Confirmation No.: 9246

For: **AUDIO FEATURES DESCRIPTION METHOD AND AUDIO VIDEO FEATURES
DESCRIPTION COLLECTION CONSTRUCTION METHOD**

CLAIMS ON APPEAL

Commissioner for Patents
P.O. Box 1450
Alexandria, Va 22313-1450

June 25, 2004

Sir:

The claims on appeal are 1-26, presented below.

Claim 1 (previously presented): A compressed or uncompressed audio data feature description scheme,

wherein audio features are hierarchically represented by setting entire audio data which corresponds to one audio program at the highest hierarchy and describing the audio features in order from higher to lower hierarchies.

Claim 2 (previously presented): A compressed or uncompressed audio data feature description scheme according to claim 1, wherein

said hierarchies are represented by one or more audio programs having a semantically continuous content and at least either an audio scene or an audio shot.

Claim 3 (previously presented): A compressed or uncompressed audio data feature description scheme according to claim 1, wherein

said hierarchy is described by at least a hierarchy identifier and a feature which includes an audio type, a feature type and audio segment information classified according to the feature types.

Claim 4 (previously presented): A compressed or uncompressed audio data feature description scheme according to claim 2, wherein

said hierarchy is described by at least a hierarchy identifier and a feature which includes an audio data type, a feature type and audio segment information classified according to the feature types.

Claim 5 (previously presented): A compressed or uncompressed audio feature description scheme according to claim 3, wherein

said audio segment information is described by any of a combination of start time code and end time code, a combination of start time code and duration, a combination of a start frame/sample number and an end frame/sample number, or a combination of start frame/sample number and number of frames/samples corresponding to duration.

Claim 6 (previously presented): A compressed or uncompressed audio data feature description scheme according to claim 4, wherein

said audio segment information is described by any of a combination of start time code and end time code, a combination of start time code and duration, a combination of start frame/sample

number and an end frame/sample number, or a combination of start frame/sample number and number of frames/samples corresponding to duration.

Claim 7 (previously presented): A compressed or uncompressed audio data feature description scheme, wherein

an audio program is described through one or more hierarchies;

an audio feature of each hierarchy is represented by an audio thumbnail indicating either one or more audio pieces or images;

the audio thumbnail is declared and described as a feature type;

if the audio thumbnail is the audio pieces, segment information of one or more audio pieces are described; and

if the audio thumbnail is the images, one or more file names of the images are described.

Claim 8 (previously presented): A compressed or uncompressed audio data feature description scheme, wherein

an audio feature of at least one audio scene or one audio shot is represented by an audio clip which is at least one audio piece having an arbitrary length equal to or shorter than that of the audio scene or the audio shot, respectively;

said audio scenes and/or audio shots are described through one or more hierarchies.

Claim 9 (previously presented): A compressed or uncompressed audio data feature description scheme according to claim 8, wherein

the key audio clip is declared and described as a feature type;
if an audio type of the key audio clips is sound, a sound representing the key audio clips is represented as the key sound;
the key sound is declared and described as a feature sub type; and
at least one audio segment corresponding to the key sound is described.

Claim 13 (previously presented): A compressed or uncompressed audio data feature description scheme, wherein

if audio data consists of multiple channels or tracks, a representative channel or track of the audio data is represented as the key stream;
the key stream is declared and described as a feature type; and
at least one audio segment corresponding to the key stream is described.

Claim 14 (previously presented): A compressed or uncompressed audio data feature description scheme, wherein

an audio clip representing an event in audio data is represented as the key event;
the key event is declared and described as a feature type;
a content of the key event is described by textual information; and
at least one audio segment corresponding to the key event is described.

Claim 15 (previously presented): A compressed or uncompressed audio data feature description scheme, wherein

an audio clip from a representative audio source in audio data is represented as the key object;

the key object is declared and described as a feature type;

a content of the key object is declared and described by textual information; and

at least one audio segment corresponding to the key object is described.

Claim 16 (previously presented): A compressed or uncompressed audio data feature description scheme, wherein

an audio program is described through one or more hierarchies;

at least one introduction or representative audio piece of each hierarchy corresponding to an audio program, an audio scene or an audio shot is represented as an audio segment;

a sequence of the audio segments is represented as an audio slide;

the audio slide is declared and described as a feature type; and

the audio segments composing the audio slide are described.

Claim 17 (previously presented): A compressed or uncompressed audio data feature description scheme, wherein

an audio program is described through one or more hierarchies;

at least one introduction or representative audio piece of each hierarchy corresponding to an audio program, an audio scene or an audio shot is saved as an audio file;

a sequence of the audio files is represented as an audio slide;

the audio slide is declared and described as a feature type; and

file names of the audio files composing the audio slide are described.

Claim 18 (previously presented): A compressed or uncompressed audio data feature description scheme, wherein

if a feature type is any of a shot, a key audio clip, a key word, a key note, or a key sound, value indicating level of the feature types is described; and

multiple audio data with said feature types are described hierarchically according to the level values.

Claim 19 (previously presented): A compressed or uncompressed audio video data feature collection description scheme, wherein

feature descriptions based on various feature types are associated with each audio video program;

the feature descriptions are extracted from multiple audio video programs based on a specific feature type;

a feature collection description is constructed by using multiple extracted feature descriptions; and

the feature collection description is described as a feature collection description file.

Claim 20 (previously presented): A compressed or uncompressed audio video data feature collection description scheme according to claim 19, wherein

the feature type is a summary type;

summary descriptions associated with each audio video programs are extracted from multiple audio video programs based on a specific summary type;
a summary collection is aggregated using multiple extracted summary descriptions; and
the summary collection is described as a summary collection description file.

Claim 21 (previously presented): A compressed or uncompressed audio video data feature collection description scheme according to claim 19, wherein

as an element for describing the feature collection description in the feature collection description file, the feature types for feature collection descriptions and contents of the feature types are described at a higher level; and

the audio video program identifiers referred to by each feature description and each corresponding segment information in the audio video programs are described.

Claim 22 (previously presented): A compressed or uncompressed audio video data feature collection description scheme according to claim 21, wherein

if the feature is a summary of audio video data, summary types for summary collection and contents of the summary types are described at a higher level as an element for describing the summary collection in the summary collection file;

the audio video program identifiers referred to by each summary description and each corresponding segment information in the audio video programs are described at a lower level.

Claim 23 (previously presented): A compressed or uncompressed audio video data feature collection description scheme according to claim 19, wherein

the feature types for feature collection descriptions and contents of the feature types are described altogether in a nested structure, whereby the feature collection can be described based on different feature types, or based on different contents among the same feature type.

Claim 24 (previously presented): A compressed or uncompressed audio video data feature collection description scheme according to claim 21, wherein

the feature types for feature collection descriptions and contents of the feature types are described altogether in a nested structure, whereby the feature collection can be described based on different feature types, or based on different contents among the same feature type.

Claim 25 (previously presented): A compressed or uncompressed audio video data feature collection description scheme according to claim 20, wherein

the summary types for summary collection descriptions and contents of the summary types are described altogether in a nested structure, whereby the summary collection can be described based on different summary types, or based on different contents among the same summary type.

Claim 26 (previously presented): A compressed or uncompressed audio video data feature collection description scheme according to claim 22, wherein

the summary types for summary collection descriptions and contents of the summary types are described altogether in a nested structure, whereby the summary collection can be described based on different summary types or based on different contents among the same summary type.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF APPEALS
APPEAL BRIEF FOR THE APPELLANTS

Ex parte Masaru SUGANO et al.

AUDIO FEATURES DESCRIPTION METHOD AND AUDIO VIDEO FEATURES
DESCRIPTION COLLECTION CONSTRUCTION METHOD

Serial Number: 09/730,607

Filed: December 7, 2000

Group Art Unit: 2655

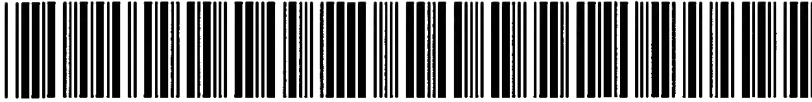
Examiner: D. D. ABEBE

William L. Brooks
Attorney for Appellants
Registration No. 34,129

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP
1725 K Street, N.W., Suite 1000
Washington, D.C. 20006
Tel (202) 659-2930
Fax (202) 887-0357

Date: June 25, 2004
Atty. Docket No. 001615

US 097306070EP1



Creation date: 12-01-2004
Indexing Officer: HGRAY - HARRY GRAY
Team: OIPEBackFileIndexing
Dossier: 09730607

Legal Date: 09-17-2004

No.	Doccode	Number of pages
1	CTNF	6
2	892	1

Total number of pages: 7

Remarks:

Order of re-scan issued on